Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

Metal Collar

Standard Grade / Precision Grade, Dimension Configurable

RoHS10

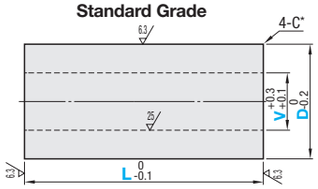
Part Number		Material	Surface Treatment
Standard Grade	Precision Grade		
FNCL	FAC	Steel for General Structure	-
FNCLC	FACS	S45C Equivalent	-
FNCLB	FABSC		Black Oxide
FNCLM	FAMSC		Electroless Nickel Plating
FNCLR	FARSC	S45C	Low Temp. Black Chrome Plating
FNCLBB	-	Brass (JIS C3604)	-
FNCLA	FAASC	2000series Aluminum Alloy	Clear Anodize
FNCLAB	-		Black Anodize
FNCLSS	FSASC	SUS304	-
FNCLSSR	FSASCR		Low Temp. Black Chrome Plating

Hardened Type P.137

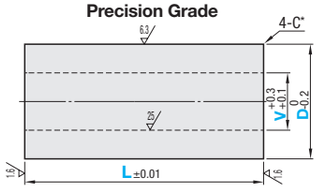
* D=16 or Less: C0.1 ~ 0.2
D=16.5 or More: C0.5 or Less

Machining Conditions
*1 Machining Limits of Collar Thickness and Overall Length
10.0≤L≤50.0··· (D-V)/2≥1
50.1≤L≤100.0··· (D-V)/2≥2
*2 Machining Limits of Collar Thickness and Overall Length (Material: A2017, Brass)
4≤D≤10 ··· V≤D-2
10.5≤D≤30 ··· V≤D-4
31≤D≤60 ··· V≤D-6
61≤D≤80 ··· V≤D-8
81≤D≤100··· V≤D-10
*3 Machining Limits of V and Overall Length
L≤Vx8

Standard Grade



Precision Grade



Standard Grade

Part Number	V 0.5mm Increment (V3 or More)	D	L 0.1mm Increment	FNCL	FNCLC	FNCLB	FNCLM	FNCLR	FNCLBB	FNCLA FNCLAB	FNCLSS	FNCLSSR
FNCL FNCLC FNCLB FNCLM FNCLR FNCLBB FNCLA FNCLAB FNCLSS FNCLSSR	(Selection) 2.0 2.6 (0.5mm Increment) 3.0~90.0	4.0~10.0 (0.5mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0						-	-		
		10.5~20.0 (0.5mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
		21~30 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
		31~40 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
		41~50 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
		51~60 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
		61~75 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
		76~80 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0							-		
		81~100 (1mm Increment)	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0							-		

Machining Conditions *1, *2, *3 Foreign Exchange and Foreign Trade Act restricts the export of collars whose O.D. is more than 75mm and over length exceed O.D. Size D>75/L75 is discontinued.

Ordering Example

Part Number	-	V	-	D	-	L
FNCLB	-	V10.5	-	D19.5	-	L50.5

Precision Grade

Part Number	V 0.5mm Increment (V3 or More)	D	L 0.1mm Increment	FAC	FACS	FABSC	FAMSC	FARSC	FAASC	FSASC	FSASCR
FAC FACS FABSC FAMSC FARSC FAASC FSASC FSASCR	(Selection) 2.0 2.6 (0.5mm Increment) 3.0~90.0	4.0~10.0 (0.5mm Increment)	10.0~ 25.0								
			25.1~ 50.0								
			50.1~ 75.0								
			75.1~ 100.0								
		10.5~20.0 (0.5mm Increment)	10.0~ 25.0								
			25.1~ 50.0								
			50.1~ 75.0								
			75.1~ 100.0								
		21~30 (1mm Increment)	10.0~ 25.0								
			25.1~ 50.0								
			50.1~ 75.0								
			75.1~ 100.0								
		31~40 (1mm Increment)	10.0~ 25.0								
			25.1~ 50.0								
			50.1~ 75.0								
			75.1~ 100.0								
		41~50 (1mm Increment)	10.0~ 25.0								
			25.1~ 50.0								
			50.1~ 75.0								
			75.1~ 100.0								
		51~60 (1mm Increment)	10.0~ 25.0								
			25.1~ 50.0								
			50.1~ 75.0								
			75.1~ 100.0								
		61~80 (1mm Increment)	10.0~ 25.0						-	-	-
			25.1~ 50.0						-	-	-
			50.1~ 75.0						-	-	-
			75.1~ 100.0						-	-	-
		81~100 (1mm Increment)	10.0~ 25.0						-	-	-
			25.1~ 50.0						-	-	-
			50.1~ 75.0						-	-	-
			75.1~ 100.0						-	-	-

Machining Conditions *1, *2, *3 No specification available for sizes without declaration of value.

Ordering Example

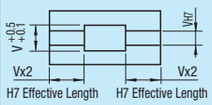
Part Number	-	V	-	D	-	L
FAMSC	-	V10.5	-	D19.5	-	L50.5

Alterations

Part Number	-	V	-	D	-	L	-	(VKC, DKC, HKC)
FNCLB	-	V10.5	-	D45	-	L70.5	-	VKC

When both I.D./O.D. tolerance changes are specified, the concentricity is Ø0.02.

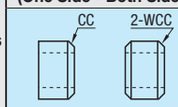
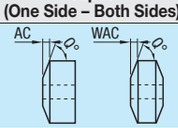
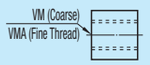
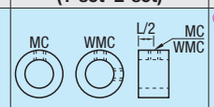
Alteration	Code	Spec.
I.D. Tolerance	VKC	Changes the I.D. Tolerance to H7. Not applicable for FNCLAB. Ordering Code VKC. Machining Conditions When V≥8 and L≥Vx5, adds a central relief shown on the right. D≥6 V≥3



D	D-V
6~10	D-V≥ 2
10.5~20	D-V≥ 3
21~30	D-V≥ 6
31~40	D-V≥ 8
41~50	D-V≥10
51~60	D-V≥12
61~70	D-V≥14
71~80	D-V≥16
81~90	D-V≥18
91~100	D-V≥20

Alteration	Code	Spec.
O.D. Tolerance	DKC (g6) HKC (h7)	Changes the O.D. Tolerance to g6 or h7. Ordering Code DKC, HKC. Machining Conditions D≥6. Not applicable for FNCLAB

D	D-V
6~10	D-V≥ 2
10.5~20	D-V≥ 3
21~30	D-V≥ 6
31~40	D-V≥ 8
41~50	D-V≥10
51~60	D-V≥12
61~70	D-V≥14
71~80	D-V≥16
81~90	D-V≥18
91~100	D-V≥20

	C Chamfering (One Side - Both Sides)	Taper (One Side – Both Sides)	Tapping	Set Screw Hole (1-set 2-set)	Slitting
Alterations					
Code	CC, WCC	AC, WAC	VM (Coarse Thread) VMA (Fine Thread)	MC, WMC	SLC
Spec.	Chamfers C plane. Ordering Code CC1.5 WCC2.5. CC, WCC=0.5mm Increment. CC, WCC≤10. CC, WCC<(D-V) / 2. L-CC≥5. L-(WCCx2)≥5	Adds a taper. Ordering Code AC3.5-Q60 WAC5.0-Q30. AC, WAC=0.5mm Increment. Q=Selection from 15, 20, 30 and 60. AC≤L-5. (D-V) / 2≥tanQxAC(WAC)+0.5	Adds a tapped hole (through). Ordering Code VMA: V should be specified as VM or VMA. Ex.) FNCL-VMA4-D10-L18. For the machining limits of tap dia. and overall length (L), see the table below. Tap dia.≤D / 2	Adds a tapped hole (coarse thread) at D part. Ordering Code MC3 WMC5. For the condition of thickness (D-V) / 2, see table below. L≥MC,WMCx3. MC, WMC=Select from table below.	Adds a slit. Ordering Code SLC. For the condition of thickness (D-V) / 2, see table below. Slit width is fixed.

Tapped Hole Dia. VM, VMA	VM Pitch (Coarse)	VMA Pitch (Fine)	L max
4	0.7	0.5	20
5	0.8		30
6	1.0	0.75	35
8	1.25	1.0	40
10	1.5		50
12	1.75		55
16	2.0	1.5	90
18	-		100
20	2.5		

MC, WMC	(D-V)/2
3, 4	3 or More
5, 6, 8	5 or More
10, 12	8 or More

O.D. D	SLC	(D-V)/2
10.0~20.0	1	5 or Less
20.5~40	2	10 or Less
41~	3	20 or Less

D, V and L dimension tolerances are the values before alteration. They may change after alteration depending on materials.